

Page 19, line 14, change "point to-point" to --point-to-point--;

In the Claims

Please add the following claims.

Sub C1 21. A computer program product for use with a computer system, the computer system having first and second processors and a server operatively coupled over a computer network, the computer program product comprising:

a computer usable medium having program code means embodied in the medium for establishing a point-to-point communications link between the first processor and the second processor over the computer network, the medium further comprising:

program code means for transmitting, from the first processor to the server, a query as to whether the second processor is connected to the computer network;

program code means for receiving a network protocol address of the second processor from the server, when the second processor is connected to the computer network; and

program code means, responsive to the network protocol address of the second processor, for establishing a point-to-point communication link between the first processor and the second processor over the computer network.

Sub B1 22. A computer program product for use with a computer system, the computer system having first and second processors and a server operatively coupled over a computer network, the computer program product comprising:

a computer useable medium having program code means embodied in the medium for establishing a point-to-point communications link between the first processor and a second processor over a computer network, the medium further

comprising:

program code means for transmitting an E-mail signal comprising a network protocol address from the first processor to the server over the computer network;

program code means for receiving a second network protocol address from the second processor over the computer network; and

program code means, responsive to the second network protocol address, for establishing a point-to-point communication link between the first processor and the second processor over a computer network.

22 *sub C27* 23. A computer server apparatus for enabling point-to-point communications between a first and a second processor over a computer network, the server apparatus comprising:

a server processor;

a network interface means, operatively coupled to the server processor, for connecting the server apparatus to the computer network;

a memory, operatively coupled to the processor, for storing a network protocol address for a plurality of processors connected to the computer network;

means, responsive to a query from the first processor, for determining the on-line status of the second processor and for transmitting the a network protocol address of the second processor to the first processor in response to a positive determination of the on-line status of the second processor.

24. The computer server apparatus of claim 23 further comprising a timer means, operatively coupled to the server processor, for time stamping the network protocol addresses stored in the memory.

25. The computer server apparatus of claim 23 further comprising:

mail processing means, responsive to an E-mail signal from the first processor, for forwarding the E-mail signal to the second processor, the E-mail signal comprising the network protocol address of the first processor.

26. In a connection server having a database and a computer network operatively coupled thereto, a method for enabling point-to-point communication between a first processing unit and a second processing unit over a computer network, the method comprising the steps of:

- A. storing in the database, a respective network protocol address for each of a plurality of processing units that have an on-line status with respect to the computer network;
- B. receiving a query from the first processing unit to determine the on-line status of the second processing unit;
- C. determining the on-line status of the second processing unit; and
- D. transmitting an indication of the on-line status of the second processing unit to the first processing unit over the computer network.

27. The method of claim 26 wherein step C further comprises the steps of:

- c.1 searching the database for an entry relating the second processing unit; and
- c.2 retrieving the network protocol address of the second processing unit in response to a positive determination of the on-line status of the second processing unit.

28. The method of claim 26 wherein step D further comprises the steps of:

- d.1 transmitting the network protocol address of the second processing unit to the first processing unit when the second processing unit is determined in

step C to have a positive on-line status with respect to the computer network.

29. The method of claim 26 wherein step D further comprises the steps of:

- d.1 generating an off-line message when the second processing unit is determined in step C to have a negative on-line status with respect to the computer network; and
- d.2 transmitting the off-line message to the first processing unit.

30. The method of claim 26 further comprising the steps of:

- E. receiving an E-mail signal comprising a first network protocol address from the first processing unit; and
- F. transmitting the E-mail signal over the computer network to the second processing unit.

31. The method of claim 30 wherein the E-mail signal further comprises a session number and wherein step F further comprises the step of:

- f.1 transmitting the session number and network protocol address over the computer network to the second processor.

32. A method for establishing a point-to-point communication link from a caller processor to a callee processor over a computer network, the caller processor having a user interface and being operatively coupled to the callee processor and a server over the computer network, the method comprising the steps of:

- A. generating an element representing a first communication line;
- B. generating an element representing a first callee processor;
- C. establishing a point-to-point communication link from the caller processor

to the first callee processor, in response to a user associating the element representing the first callee processor with the element representing the first communication line.

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33. The method of claim 32 wherein step C further comprises the steps of:
- c.1 querying the server as to the on-line status of the first callee processor; and
  - c.2 receiving a network protocol address of the first callee processor over the computer network from the server.
34. The method of claim 32 further comprising the step of:
- D. generating an element representing a second communication line.
35. The method of claim 34 further comprising the step of:
- E. terminating the point-to-point communication link from the caller processor to the first callee processor, in response to the user disassociating the element representing the first callee processor from the element representing the first communication line; and
  - F. establishing a different point-to-point communication link from the caller processor to the first callee processor, in response to the user associating the element representing the first callee processor with the element representing the second communication line.
36. The method of claim 32 further comprising the steps of:
- D. generating an element representing a second callee processor; and
  - E. establishing a conference point-to-point communication link between the caller processor and the first and second callee processors, in response

to the user associating the element representing the second callee processor with the element representing the first communication line.

37. The method of claim 32 further comprising the step of:

F. removing the second callee processor from the conference point-to-point communication link in response to the user disassociating the element representing the second callee processor from the element representing the first communication line.

38. The method of claim 32 further comprising the steps of:

D. generating an element representing a communication line having a temporarily disabled status; and

E. temporarily disabling a point-to-point communication link between the caller processor and the first callee processor, in response to the user associating the element representing the first callee processor with the element representing the communication line having a temporarily disabled status.

39. The method of claim 38 wherein the element generated in step D represents a communication line on hold status.

40. The method of claim 39 wherein the element generated in step D represents a communication line on mute status.

41. The method of claim 32 wherein the caller processor further comprises a visual display and the user interface comprises a graphic user interface.

Sub B2

42. The method of claim 41 wherein the elements generated in steps A and B are graphic elements and the step of establishing a point-to-communication link as described in step C is performed in response to a user manipulating the graphic elements on the graphic user interface.

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43. A computer program product comprising:  
a computer usable medium having program code means embodied in the medium for establishing a point-to-point communication link from a caller processor to a callee processor over a computer network, the caller processor having a user interface and being operatively coupled to the callee processor and a server over the computer network, the medium further comprising:

program code means for generating an element representing a first communication line;

program code means for generating an element representing a first callee processor;

program code means, responsive to a user associating the element representing the first callee processor with the element representing the first communication line, for establishing a point-to-point communication link from the caller processor to the first callee processor.

44. The computer program product of claim 43 wherein the means for establishing a point-to-point communication link further comprises:

program code means for querying the server as to the on-line status of the first callee processor; and

program code means for receiving a network protocol address of the first callee processor over the computer network from the server.

45. A computer program product of claim 43 further comprising:  
program code means for generating an element representing a second communication line.

46. The computer program product of claim 45 further comprising:  
program code means, responsive to the user disassociating the element representing the first callee processor from the element representing the first communication line, for terminating the point-to-point communication link from the caller processor to the first callee processor; and

program code means, responsive to the user associating the element representing the first callee processor with the element presenting the second communication line, for establishing a different point-to-point communication link from the caller processor to the first callee processor.

47. The computer program product of claim 43 further comprising:  
program code means for generating an element representing a second callee processor; and

program code means, responsive to the user associating the element representing the second callee processor with the element representing the first communication line, for establishing a conference communication link between the caller processor and the first and second callee processors.

48. The computer program product of claim 47 further comprising:  
program code means, responsive to the user disassociating the element representing the second callee processor from the element representing the first communication line, for removing the second callee processor from the conference communication link.



49. The computer program product of claim 43 further comprising:  
program code means for generating an element representing a communication line having a temporarily disabled status; and

program code means, responsive to user associating the element representing the first callee processor with the element representing the communication line having a temporarily disabled status, for temporarily disabling the point-to-point communication link between the caller processor and the first callee processor.

50. The computer program product of claim 49 wherein the communication line having a temporarily disabled status comprises a communication line on hold status.

51. The computer program product of claim 49 wherein the communication line having a temporarily disabled status comprises a communication line on mute status.

52. A computer program product of claim 43 wherein the caller processor further comprises a visual display and the user interface comprises a graphic user interface.

53. The computer program product of claim 52 wherein the element representing the first communication line and the element representing the first callee processor are graphic elements and wherein the program code means for establishing a point-to-point communication link from the caller processor to the first callee processor further comprises:

program code means, responsive to a user manipulating the graphic elements on the graphic user interface, for establishing the point-to-point communication link from